

**BUHWEJU DISTRICT LOCAL GOVERNMENT  
ACADEMIC BOARD  
P.7 MOCK 2024  
MATHEMATICS**

**TIME ALLOWED: 2HRS AND 30 MINUTES**

**INDEX NO**

<b>Emis number</b>	<b>Personal number</b>

**Candidate's Name .....**

**Candidate's Signature .....**

**School Name .....**

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

**Read the following instructions carefully.**

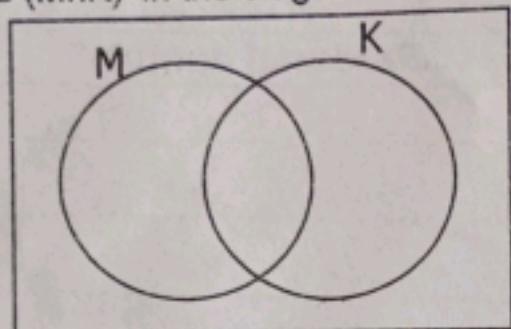
1. This paper is made up of two sections A and B
2. Section A, has 20 questions 40 marks
3. Section B has 12 questions. (60 marks)
4. Attempt ALL questions. ALL answers in both Section A and B **MUST** be written in the spaces provided.
5. All answers must be written in blue or black ball point or ink. Only diagrams and Graphs work must be done in pencil.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot be easily read may

<b>FOR EXAMINER'S USE ONLY</b>		
<b>pages</b>	<b>Marks</b>	<b>Examiner's No.</b>
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
<b>TOTAL</b>		

**SECTION A (40 MARKS)**

1. Work out:  $725 + 64$

2. Shade  $(M \cap K)'$  in the diagram below



3. Write 6041 in words.

4. Simplify:  $1\frac{1}{2} + \frac{3}{4}$

5. Solve for n:  $\frac{3n}{4} = 9$

6. Express  $3\frac{1}{3}$  hours to seconds

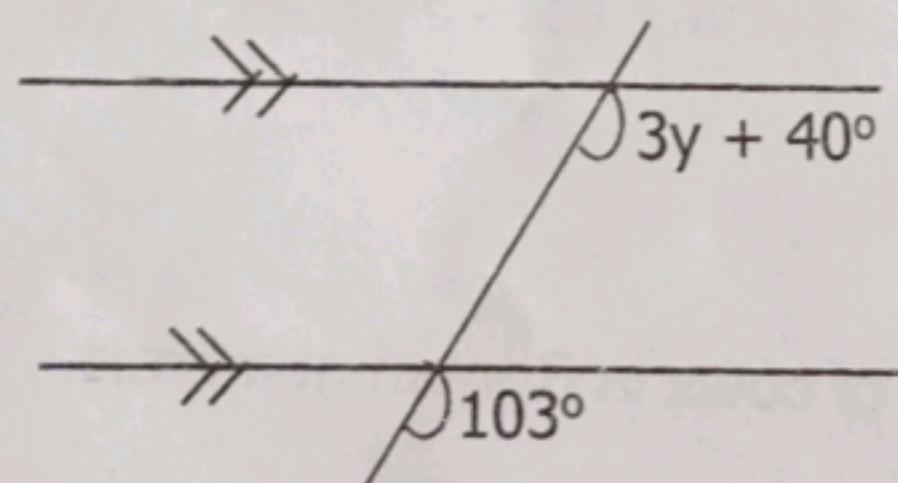
7. Work out:  $3 - 5 = \dots \pmod{7}$  using a dial.

8. Write  $7 \cdot 03 \times 10^{-2}$  as single number

9. During an assembly, Musa was in the 11<sup>th</sup> position from in front of the line and the 24<sup>th</sup> position from behind. Calculate the number of pupils were that standing in the line.

10. A trader bought a tray of eggs at sh.15, 000. How much can he sell each egg to make a profit of sh.3, 000?

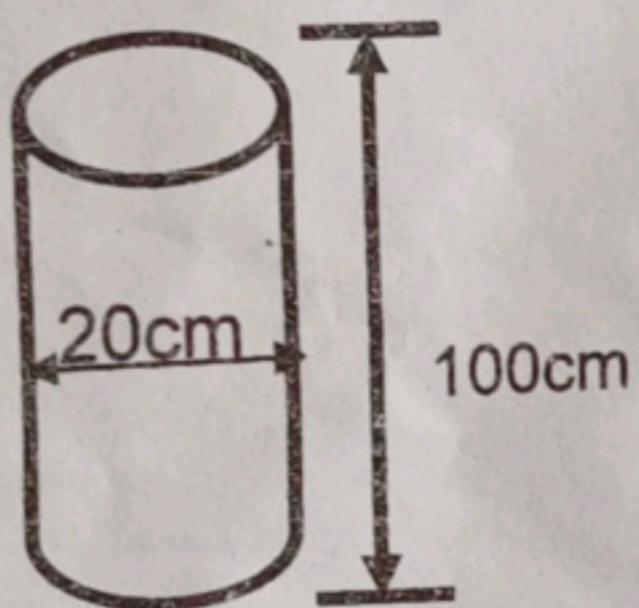
11. Find the value of  $y$  in the figure below.



12. Express 12:35 pm in military format

13. Given that  $r = 3$  and  $p = 4$ . Find the value of  $2r - p$

14. Find the capacity of a cylindrical water can below (use  $\pi = 3.14$ )



15. Find the GCF of 84 and 90

16. Kariisa has 69 cows. Express his number of cows in Roman numerals.

17. Work out:

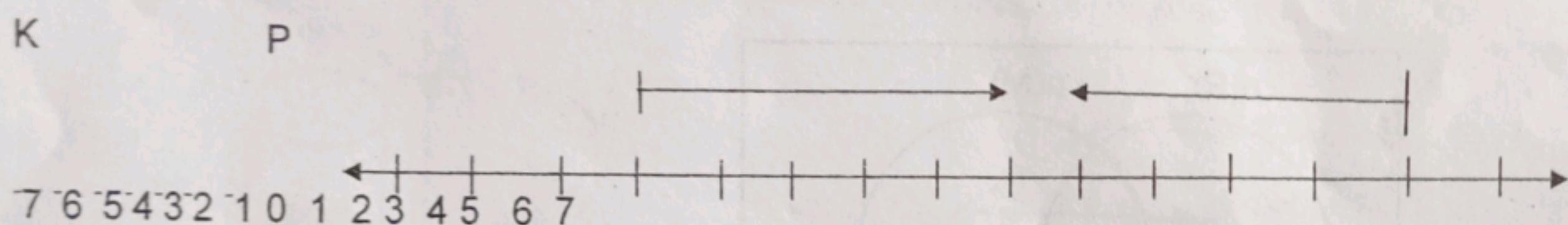
$$\begin{array}{|c|c|}\hline & \times & \\ \hline \end{array} \quad \begin{array}{|c|c|c|}\hline \text{X} & & \\ \hline \text{X} & \text{X} & \text{X} \\ \hline \text{X} & \text{X} & \text{X} \\ \hline \end{array} \quad = \quad \begin{array}{|c|c|c|}\hline & & \\ \hline & & \\ \hline & & \\ \hline \end{array}$$

(ii)

18. Find the next number in the sequence

10, 11, 19, 46, .....

19. Find the integers represented on the number line below.



P = .....

K = .....

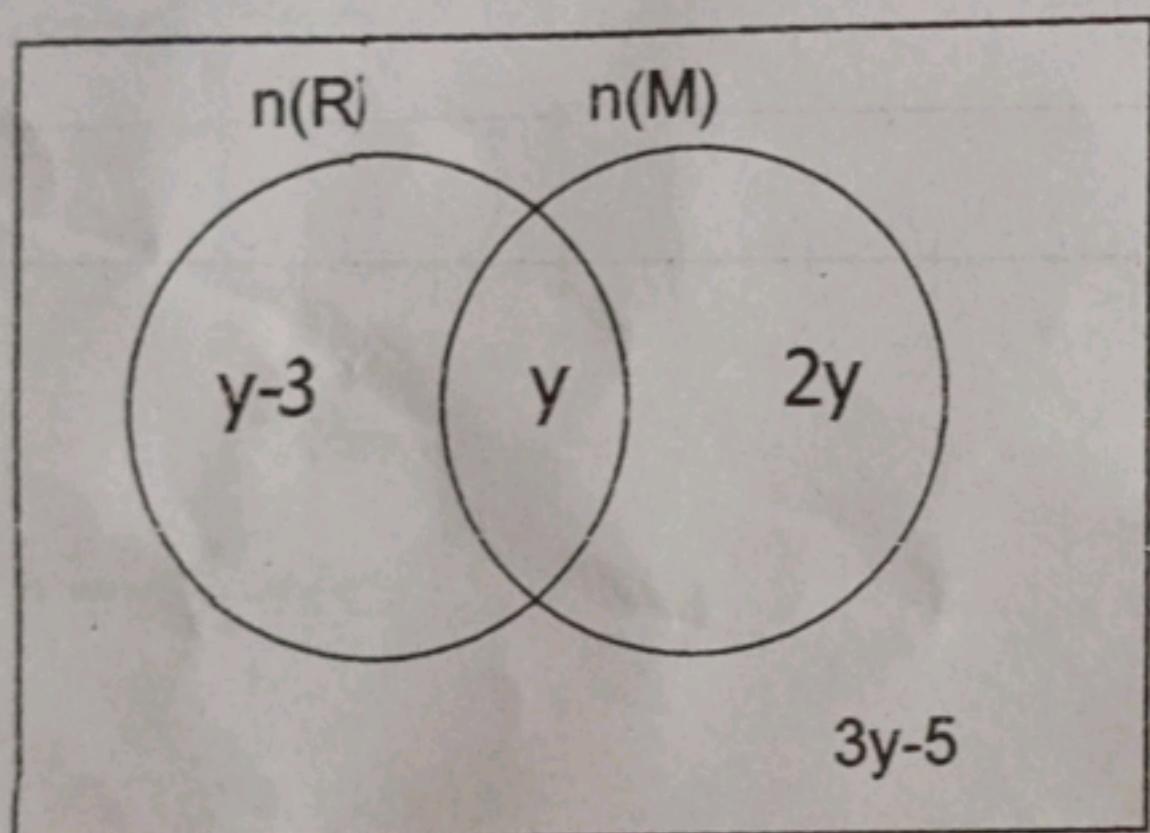
20. 60kg of sugar are to be packed in Sackets of 500gms and 250gms. A trader packed 100 Sackets of 250gms each. Calculate the number of Sackets of 500gms each that he packed

**SECTION B (60 MARKS)**

(2 mks)

21.(a) Work out:  $1011_{\text{two}} + 11_{\text{two}}$ (b) Find the value of base n:  $103_n = 124_{\text{five}}$  (3mks)

22. The Venn diagram below represents pupils in a class who ate different types of meals that is; rice (R) and matoke (M)



(a) Given that 28 pupils ate other types of food. Find the value of y. (2mks)

(b) Calculate the number of pupils who did not eat matoke. (2 mks)

23. Famuzah went to the market with two thousand shilling notes numbered consecutively from PK873522 to PK873546 and bought the following items.

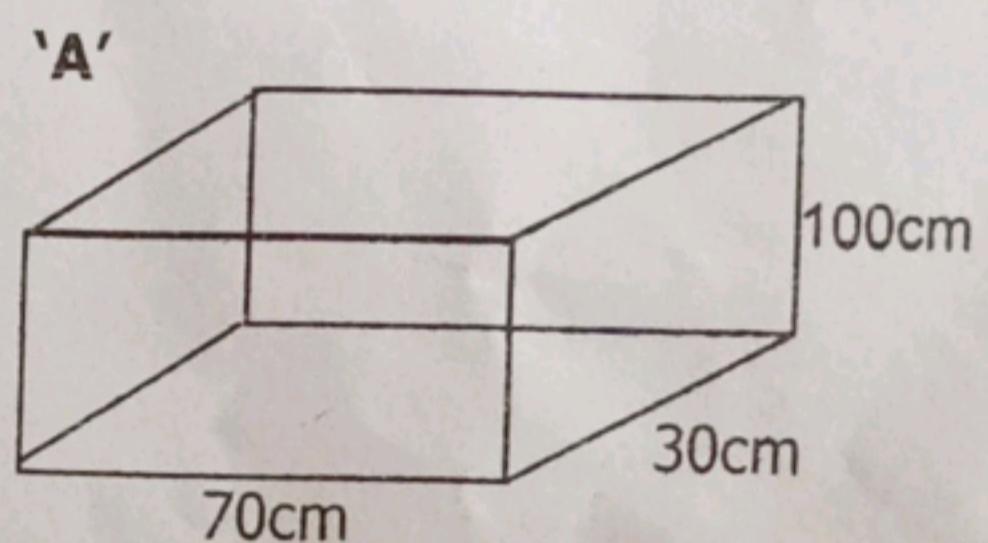
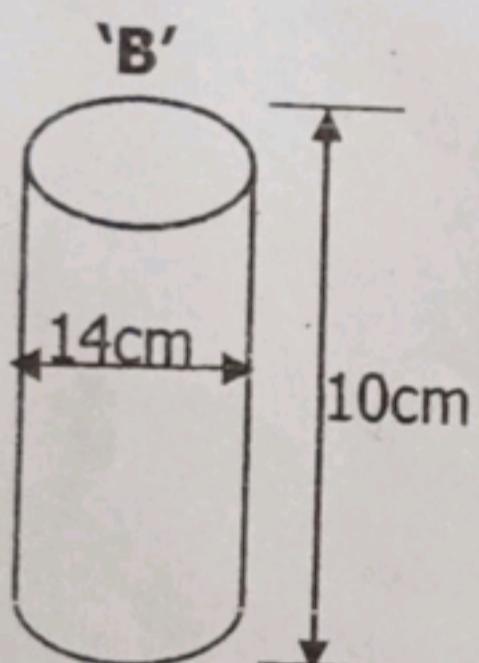
A dozen of books at sh.2000 every two books

2kg of meat at sh. 14000 per kg

750ml of cooking oil at sh. 10000 per litre

Calculate his change .(5 mks)

24. Small cylindrical tins (B) are to be packed in a big box (A). (use  $\pi = \frac{22}{7}$ ) (4mks)



(a) Find the number of cylindrical tins of size B that can fit in the first layer of a big box A.(2mks)

(b) Calculate the amount of space left after packing all the possible cylindrical tins of size B into a big box A (4 mks)

25. Andrew is 8 years younger than his brother Tom who is 23 years old. After how many years will the ratio of their age be 5:7? (4 mks)

26. Using a ruler, a pencil and a pair of compasses only. Construct a triangle PAN such that angle APN =  $75^{\circ}$ , line PA = 6.5cm and line PN = 5cm (4 mks)

(c) Measure line AN (1mk)

27.(a) The average weight of 10 pupils is 20kg. If 2 pupils whose weight is 15kg and 17kg leave the group. Calculate the average age of remaining pupils. (4mks)

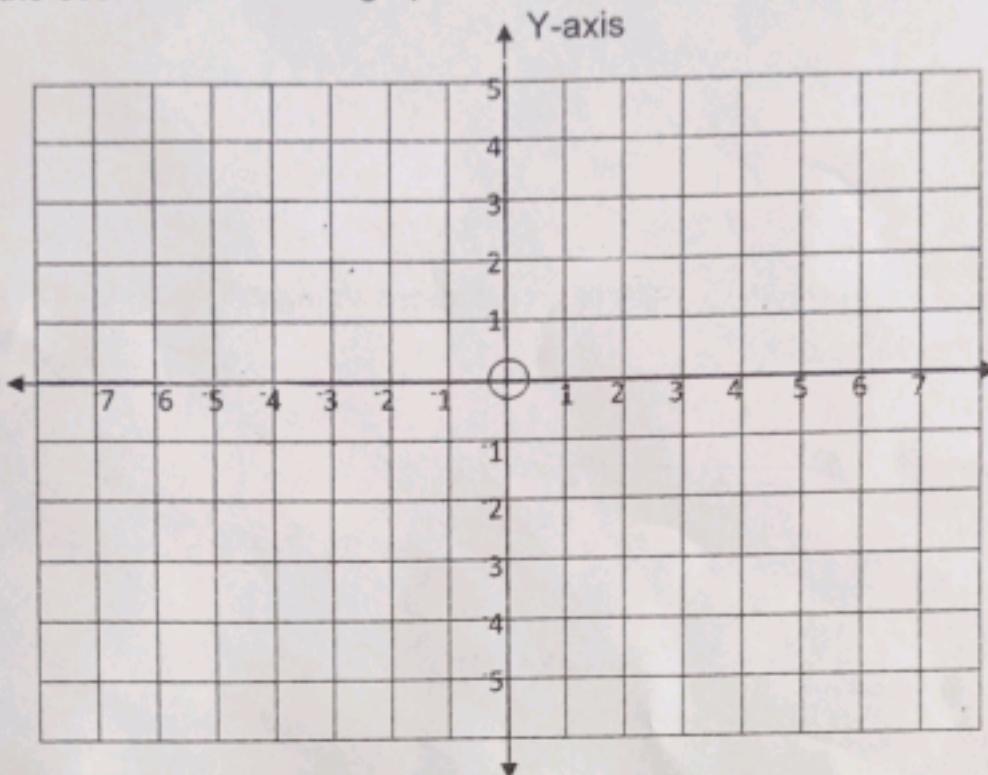
(b) Work out the range of the following integers  
-2, -5, -4, 0, -11 and -7 (1 mk)

28. A motorist started driving at 7:30am from Kasese to Mbarara at an average speed of 90km/hr. for 2 hours before he was stopped by the traffic police which held him for an hour. If a motorist was left with a quarter of the journey to reach Mbarara. Calculate the speed at which he drove in order to reach Mbarara at 11:30am (5mks)

29. Given that coordinates M(-2,3), A(-2,0), K(4,0) and E(2,3)

(a) Plot the coordinates on the graph below

(4mks)



(b) Join the dots M to A, A to K, K to E and E to M

(1mk)

(c). Name the geometric figure formed

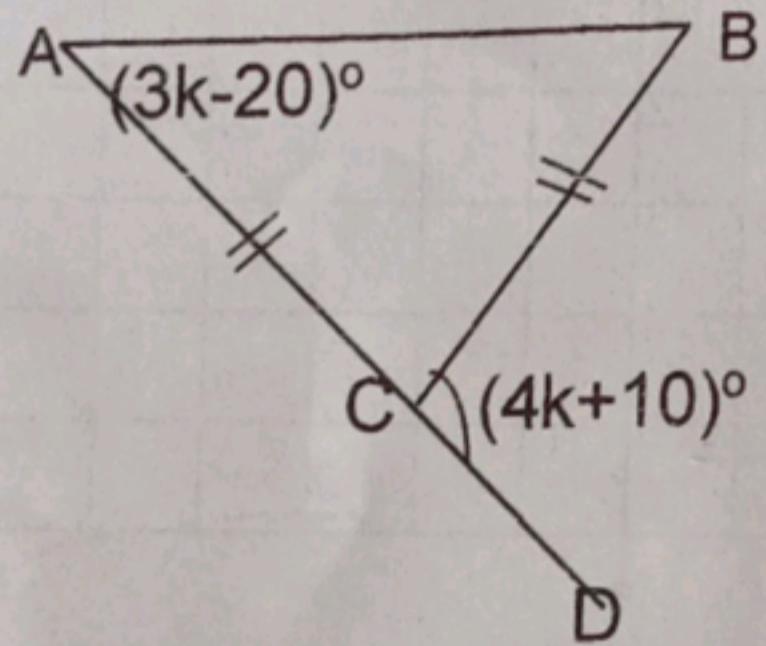
(1mk)

30. The sum of three consecutive multiples of three is 108. If the least multiple is  $3k-3$   
find k and list the three multiples. (5mks)

31.(a) Express 0.2666... as a common fraction in its lowest terms. (2mks)

(b). Simplify:  $\frac{2}{5} + \frac{3}{4} \div 1\frac{1}{3}$  (3mks)

32.(a) In the figure below, ABC is an isosceles triangle. Study it carefully and find the value of k (3mks)



(b) A regular polygon has 12 right angles. Find its number of sides. (2mks)

**\*SUCCESS\***